safety at cms

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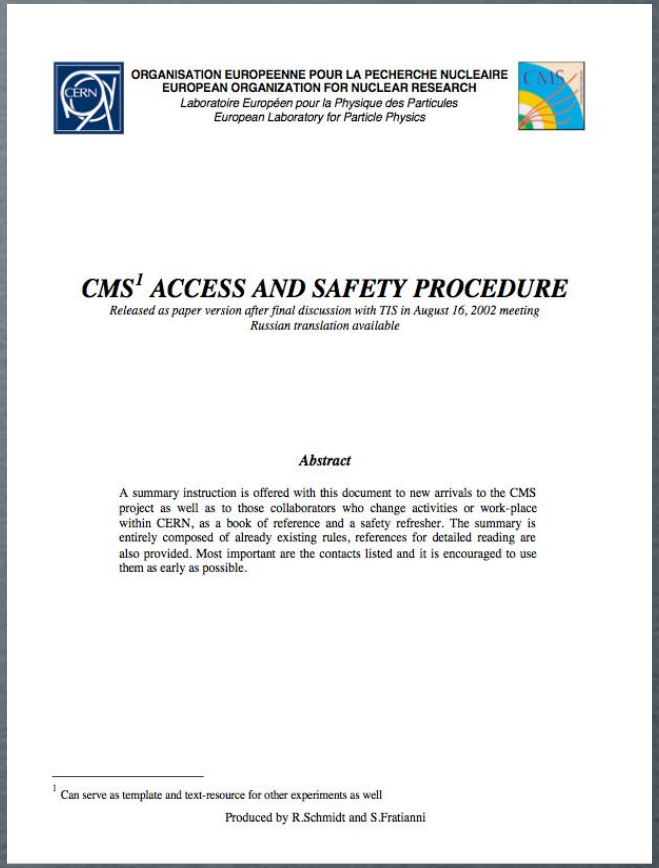
CERN Safety documents

Main safety Documents

SAPOCO
Safety codes
Divisional safety plans
Safety instructions
Specific rulings
Operational instructions

others

Safety notes
Safety bulletin
Safety guide for experiments



ORGANISATION EUROPEENNE POUR LA PECHERCHE NUCLEAIRE
EUROPEAN ORGANIZATION FOR NUCLEAR RESEARCH
Laboratoire Européen pour la Physique des Particules
European Laboratory for Particle Physics

CMS[1] ACCESS AND SAFETY PROCEDURE

Released as paper version after final discussion with TIS in August 16, 2002 meeting
Russian translation available

Abstract

A summary instruction is offered with this document to new arrivals to the CMS project as well as to those collaborators who change activities or work-place within CERN, as a book of reference and a safety refresher. The summary is entirely composed of already existing rules, references for detailed reading are also provided. Most important are the contacts listed and it is encouraged to use them as early as possible.

[1] Can serve as template and text-resource for other experiments as well

Produced by R.Schmidt and S.Fratianni

These documents are available on the web (EDMS) or from the group secretary

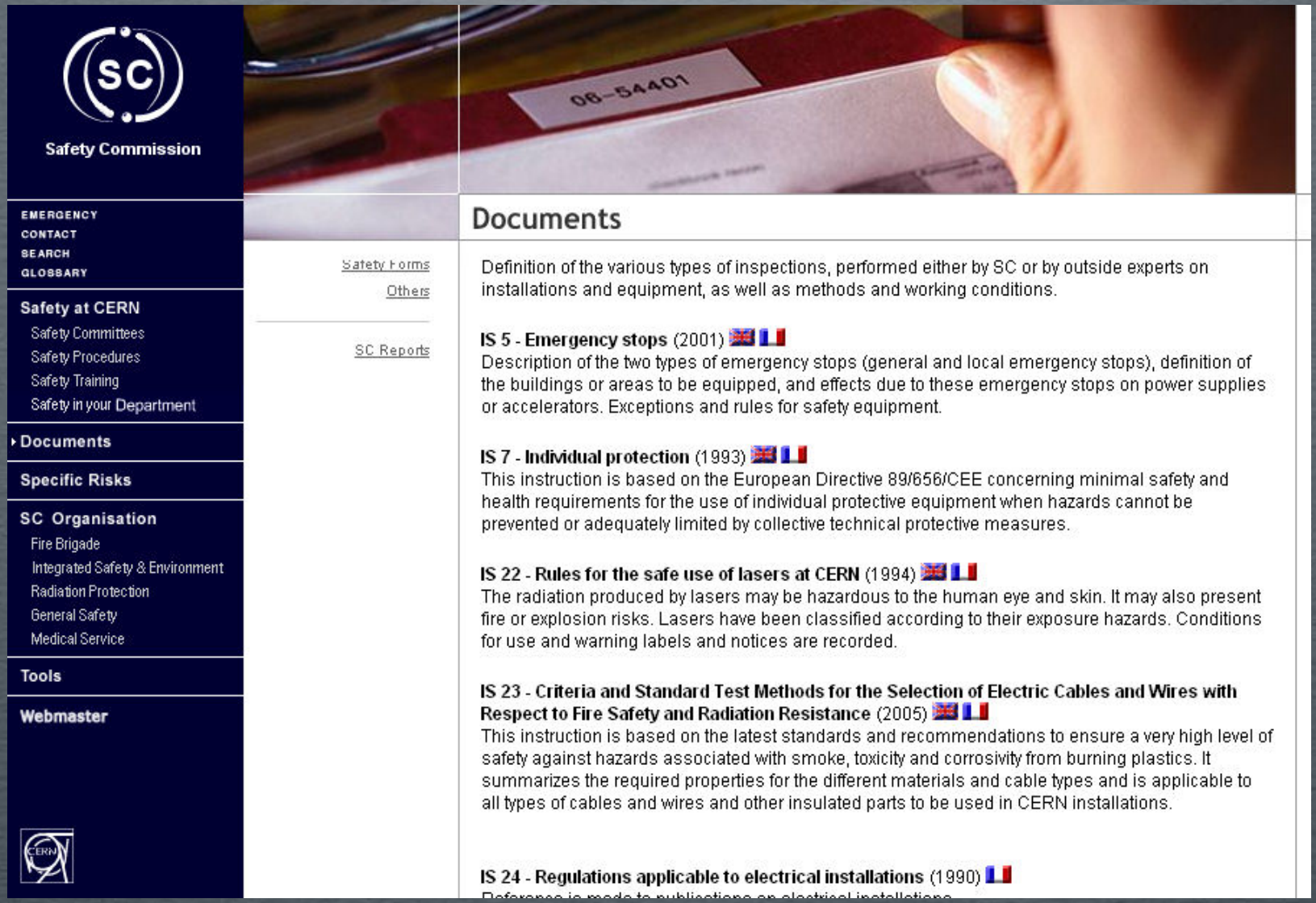
CMS Access and Safety Procedure

- Valid for contractors and collaborators
- Gives all the information necessary for installation at CERN
- Provides reference to all CERN safety rules and documents

Available on EDMS:
https://edms.cern.ch/document/355707/1

CERN Safety Documents

Special risks present at CERN/CMS have been analyzed and the relative Safety Documents are available on the SC web-site



CMS Safety Structure

GLIMOS	➢	Christoph Schaefer
Deputy GLIMOS	➢	Stefano Fratianni
Technical Coordinator	➢	Alain Herve
Deputy Technical Coordinator	➢	Austin Ball
FGSO	➢	Christoph Schaefer
CSO	➢	Jean-Paul Grillet
Test beams	➢	Emmanuel Tsesmelis

SX5 (Point 5) and Assembly Hall Safety Structure

186 Build. TSO	➢	Jack Hill
904 Build. TSO	➢	Manuel Dos Santos
ISR TSO	➢	Daniel Arevalo
SX5 TSO	➢	Lucien Veillet
SX5 Deputy TSO	➢	Jean-Pierre Girod
Point 5: Site Safety Coordinator	➢	Jean Weber

CMS Underground Area

UXC 55
TS is responsible for safety
until "ready for gantry crane": end 2005

➤ J. Osborne

USC55:
TS responsible for safety
until "ready for crates": end 2005

➤ J. Osborne

No works are foreseen for collaborators in the underground caverns until beginning 2006

Safety Organization

LHC project requires

Site safety coordinators

Equipment installation

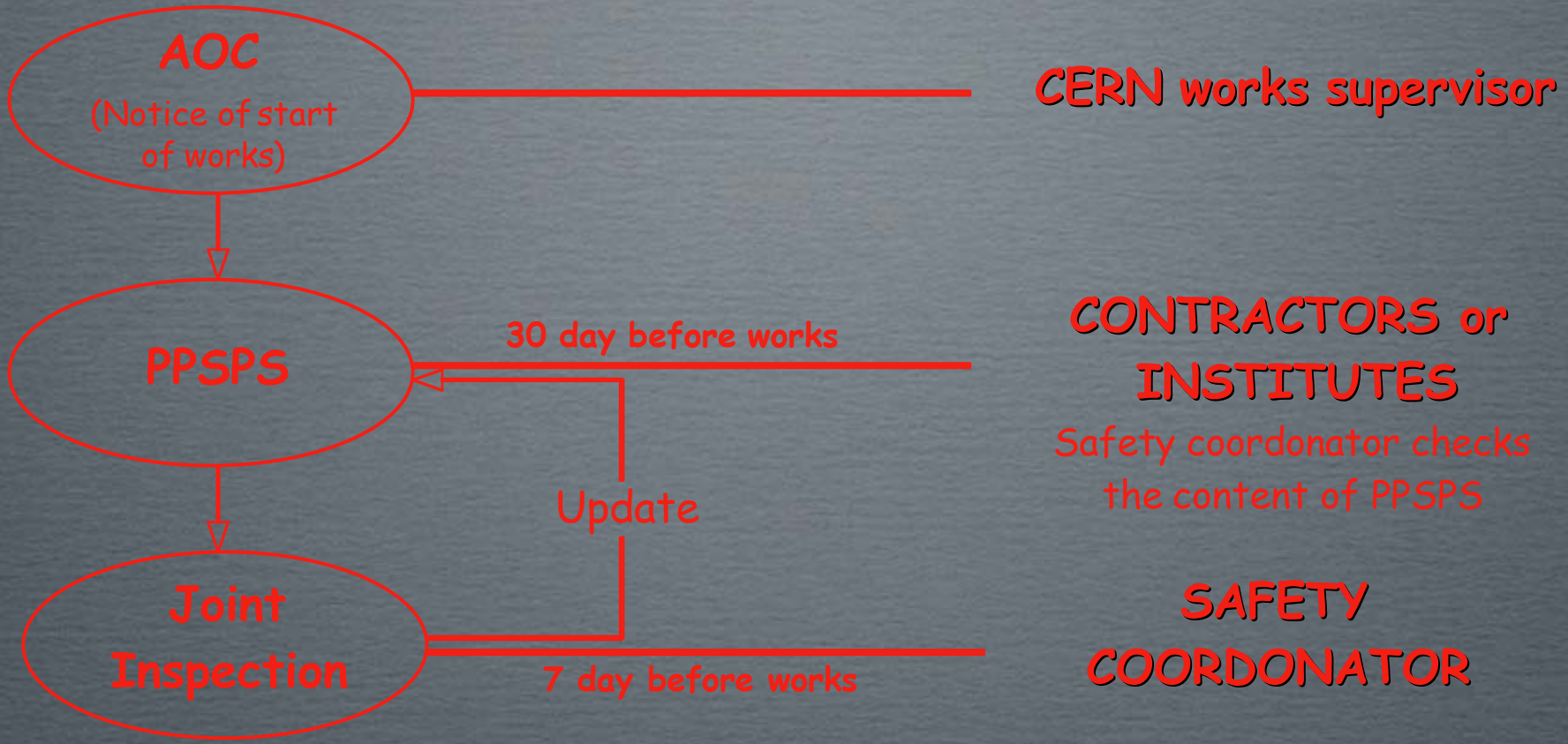
Civil Engineering work

PGCSPS
Overall Safety and Health Protection Plan

PPSPS
Plan Particulier de Sécurité et de la Protection de la Santé

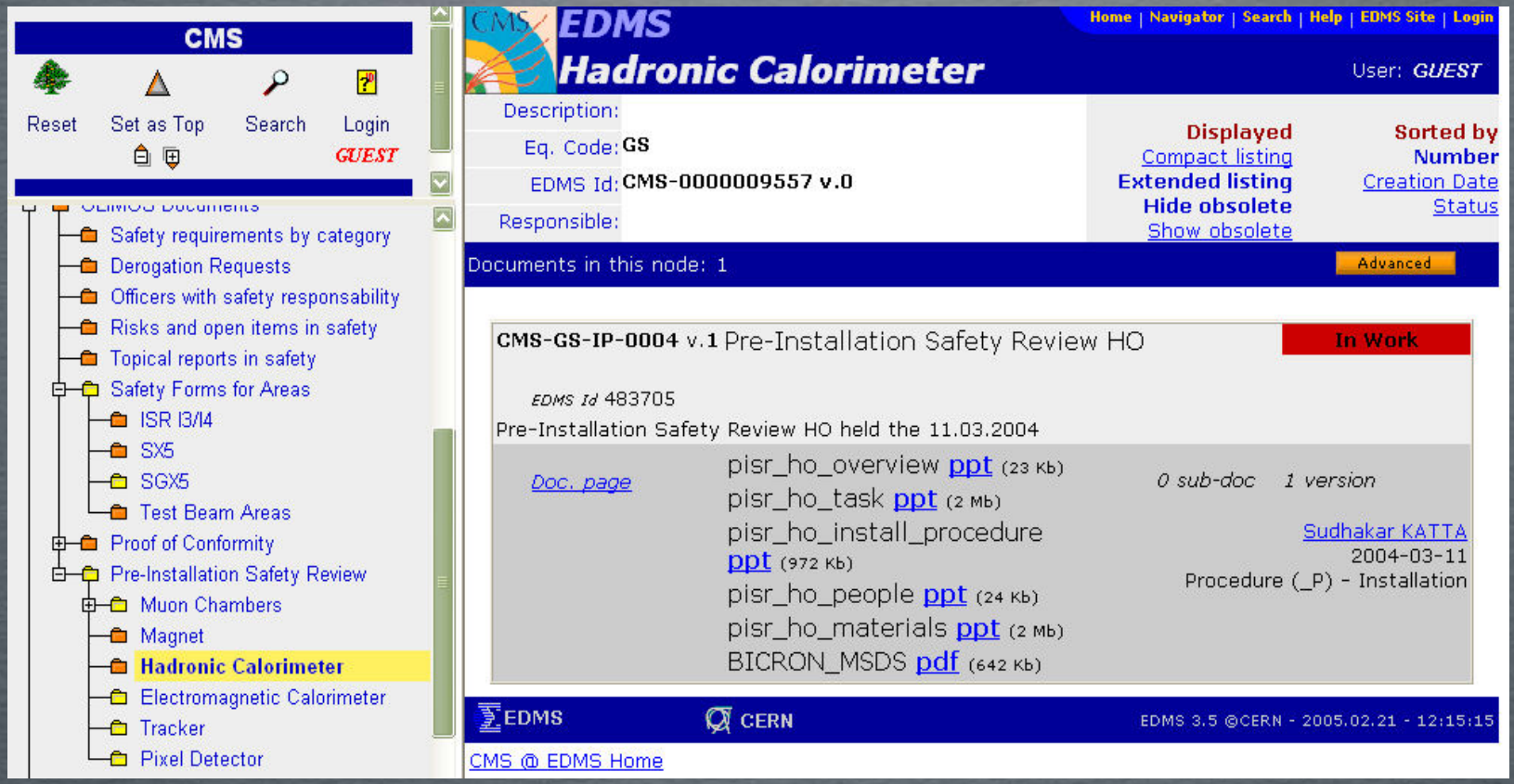
The PPSPS shall be filled in either by contractor, or by collaborating institutes

Safety Procedures before Work



Pre-Installation reviews

* Installation review with CMS Safety responsible before start of the work



* The “Plan Particulier de Sécurité et de Protection de la Santé: PPSPS” completed
* Regular Inspection are done (and recorded) by safety responsible (SC and CMS) to check all safety measures are applied.

PPSPS Main Aspects

⇨ **Information related to staff**

- Qualification
- Habilitation
- First aid
- Medical aspects

⇨ **Risks**

- Fall risk (person, materials)
- Crash risk
- Crushing risk
- Electrical risks (direct/indirect)
- Chemical risks
- Work at height
- Noise
- Fire, explosion
- Radiation
- Confined spaces
- Magnetic fiels
- Laser

Method Statement

Joint inspection

During the joint inspection, the following persons are present:

* Works supervisor or local supervisor
* Safety coordinator
* Contractor's (or collaborating institutes) representant (preferably, the person permanently present on site and sub contractor)

Safety coordinator launches the joint inspection

Specific Hazards of Hall SX5

1. Noise
2. Manipulation of heavy loads
3. Work at height
4. Electricity
5. Magnetic fields
6. Cryogenics
7. Fire permit
8. Confined spaces
9. Chemical & flammable gas
10. Laser
11. Radiation

Courses and Authorizations

Only professionals are authorized to drive overhead cranes of capacity >20t
For Cranes <20t a formal training course is required

All crane operators must be trained to practice slinging: it is a part of training related to gantry crane

Assembling and any modifications must be carried out by qualified personnel

For operation of special hydraulic access devices a formal training is required

ELECTRICITY, Gas Systems, Water Systems, Tests..

* Every electric system shall be inspected by SC before being powered!

* For tests exist special procedures to follow in order to work safe

* Every test, work or intervention shall be approved by the GLIMOS

CMS Insurance

CMS assembly hall at Point 5 has been checked by insurance inspectors.

Work conditions, safety procedures, prevention and protection systems have been verified and approved.

All surface and underground assembly work at Point 5 is covered by a special work site insurance